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July 11, 2017

## -- Via E-Mail (Nancy.Hamill@dep.nj.gov)--

Ms. Nancy Hamill
Bureau of Environmental Evaluation and Risk Assessment
New Jersey Department of Environmental Protection
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P.O. Box 420
Trenton, New Jersey 08625-0420

## **RE:** Response to NJDEP Ecological Component Review Comments

Crows Mill Creek Field Sampling Plan, AOC 25, CDG-382 Area, May 2017 Hatco Corporation, PI No. G000003943 Comment Receipt Date: June 13, 2017

Dear Ms. Hamill:

Licensed Site Remediation Professional (LSRP) Mark Fisher and Weston received comments on the ecological components of the Crows Mill Creek Field Sampling Plan (FSP) for the Hatco site, dated June 13, 2017. New Jersey Department of Environmental Protection's (NJDEP) comments were presented in an undated memorandum from you to myself as the LSRP for this project. Weston and the LSRP of Record for the Site respectfully provide this letter responding to each comment. Each of NJDEP's comments is reproduced below followed by the associated response.

**Comment 1.** (p. 1) <u>Background and Rationale</u> – the target concentration for delineation should be specified. Pursuant to N.J.A.C.7:26E-4.8, horizontal and vertical delineation is required to the ecological screening criterion (ESC) for BEHP in sediment. Rationale was not provided for omission of the surface (0-0.5') interval for all sample locations (Table 1); it is the opinion of this reviewer that the surface interval should be included, due to the erosion/deposition potential.

**Response 1:** As discussed with NJDEP, Weston will make reasonable efforts to delineate BEHP in sediment to the Severe Effects Level ESC of 0.75 mg/kg. However, it is expected that the site-specific risk assessment will demonstrate an appropriate remediation standard that is higher than the ESC. Therefore, should analytical results indicate concentrations close to the ESC, Weston will discuss the findings with NJDEP prior to any decision for further sampling.

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The FSP provides the rationale for the proposed sampling intervals, which is to delineate contamination previously reported at 2.5 to 3 feet below the water/sediment interface. Contaminant concentrations in the 0- to 0.5-foot depth interval were previously shown to be below the ESCs. The specific objective is to determine whether the exceedance previously detected at location CDG\_382 reflects an isolated hotspot or more widespread contamination at that depth interval. However, we do not understand the purpose of resampling an interval where previous sampling has demonstrated no impacts. If there is a specific location where there is evidence of shallower impacts and or erosion/deposition is of concern then an additional sample can be collected from the 0- to 0.5-foot interval at that location.

The FSP is hereby revised to include up to two contingency samples to be collected from the 0- to 0.5-foot depth interval at locations to be determined based on field observations. Samples will be collected at the 0- to 0.5-foot interval under the following conditions:

- Visible evidence of contamination
- Area of unusual erosion and/or deposition that is inconsistent with conditions along this reach of the stream.

**Comment 2.** TOC and particle grain size should be included at each location.

**Response 2:** The proposed scope of work is intended to complete the delineation following the same protocols as the previous work in this AOC. However, while sampling did not include TOC and particle grain size at each location, it is recognized that these parameters may be useful for the planned risk assessment. Therefore, the FSP is hereby modified to include the following analyses for each of the sediment samples:

- TOC Lloyd Kahn procedure
- Particle size distribution using sieve analysis ASTM D6913/D6913M
- Particle size distribution of fine grained soils by hydrometer analysis ASTM D7928

**Comment 3.** Co-located surface water samples are recommended at a minimum of three of the proposed sediment locations.

**Response 3:** The objective of the co-located surface water samples for the proposed delineation sampling program is unclear. Surface water in this area was not identified as a site-related impacted medium. Therefore, no surface water sampling is proposed as part of this work. Given that the planned investigation area is limited in extent and represents only a small portion of the AOC far from the known and suspected source area(s), we are concerned that analysis of a small number of surface water samples will provide data that



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are difficult or impossible to interpret fully. Further surface water and/or sediment sampling may be recommended as part of the risk assessment, the scope of which will be developed based, in part upon the results of this work.

We trust that these comments are responsive. This letter will be appended to the FSP. We will schedule the proposed sampling following confirmation of NJDEP's receipt and review of this letter.

Sincerely,

THE ELM GROUP, INC.

Mark D. Fisher, CHMM, LSRP

Principal

MDF:fpr

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